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STEM AND FROND NECROSIS OF PALM

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An important industry to Florida is the cultivation of palms. These are utilized in such diverse forms as dish gardens, outdoor landscaping in the southern states, and potted plants for indoor beautification throughout North America. A stem and frond necrosis, caused by the fungus Gliocladium vermoeseni (Biourge) Thorn can cause considerable damage to several species of palms. The disease was first reported in Florida in 1964 (3) although it was earlier described in Belgium in 1923 and California in 1938 (1).

The disease is most commonly seen affecting the genus Chamaedorea, mostly C. seifrizii Burret, C. elegans Mart., and C. erumpens H. E. Moore, although it has also been reported on Chrysalidocarpus (Areca) lutescens Wendl., Archontophoenix cunninghamiana (H. Wendl.) H. Wendl. & Drude, Howeia (Kentia) forsteriana (C. Moore & F. Muell.) Becc., Washingtonia filifera (L. Lind.) H. Wendl., W. robusta Wendl., Phoenix canariensis Chabaud., and Arecastrum romanzoffianum (Cham.) Becc. (Cocos plumosa).

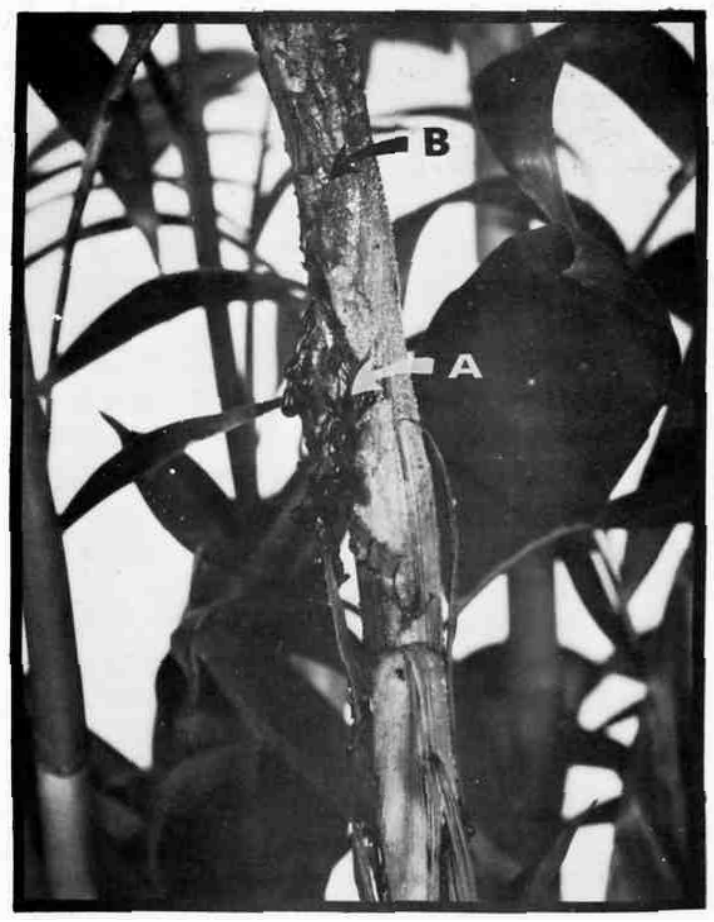

Fig. 1. Gliocladium disease of Chamaedorea erumpens A) Showing oozing gum. B) Masses of pink spores.

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Although natural spread of the fungus has not been investigated, its prolific sporulation on infected tissue should provide high inoculum levels and infection under favorable climatic conditions (2).

SYMPTOMS. The first symptoms are dark brown necrotic areas appearing on the stem. These may occur just above the soil line or, on large specimens, as much as 2–3 feet up the stem. The spots are often associated with oozing gum pockets (fig. 1A). The oldest fronds die prematurely, first showing necrotic streaks from the base of the rachis outward, with the pinnae often turning a yellowish brown on one side of the rachis.

The fungus may be seen sporulating on leaf sheaths and necrotic stem tissue. It is evident as masses of pink spores (fig. 1B).

CONTROL. The response of this disease to fungicides has not been evaluated. It has been noted, however, that the fungus is favored by cool weather, and that the disease most often appears following extended periods of rain. It has also been suggested that overhead irrigation might provide the proper conditions for infection (2).

Literature Cited

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